

**Notice of Allowability**

Application No.

09/546,031

Examiner

Clement B. Graham

Applicant(s)

KEITH, CHRISTOPHER

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 6/7/2007.
2. ☒ The allowed claim(s) is/are 1-22 24, 26-37.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f):
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892).
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

FRANTZY POINVIL  
PRIMARY EXAMINER

*Handwritten signature*  
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## **EXAMINER'S AMENDMENT**

### **Allowable Subject Matter**

Claims 1, 7, 12, 27, 34 are allowed.

The following is a statement of reasons for indication of allowable subject matter.

The prior art fails to teach, or suggest, the limitations of:

" determining whether any of the first computer program entities has offered an improved price for the security, wherein the improved price is higher than the proposed price for buying or lower than the proposed price for selling, and if an improved price has been offered, providing the improved price as the published price to the plurality of market participants.

" (as in independent Claims 1, 7, 12, 27, 34);

Keiser et al (US Patent No: 6, 505, 174) discloses a The system includes a virtual specialist program which, among other things, handles fulfillment of buy and sell orders. In the embodiment of the present system, the virtual specialist program controls the economy, and provides it with liquidity. In one embodiment, the virtual specialist program provides instantaneous liquidity by fulfilling all orders, whether or not there are equal and matching sell orders to offset buy orders, and vice versa. The system keeps a running net movement balance for the quantity of buy or sell trades which the virtual specialist program had to fulfill without offsetting sell or buy trades. The imbalance is stored as a positive number if the buy-sell imbalance represents more buy trade orders executed than sell orders, or a negative number if the buy-sell imbalance represents more sell orders executed than buy orders.

Unlike the case with non-virtual markets, the virtual specialist program of the embodiment does not control the economy by setting prices of shares based on last executed buy order price offered. Rather, the virtual specialist program determines the price of an instrument after each trade by computing and effecting an outstanding buy-sell imbalance.

he buy-sell imbalance, also referred to herein as the net movement balance (NMB), controls security prices by incrementing or decrementing security prices using a combination of a security price increment (SPI) constant, and a pair of security price

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threshold constants. Both a positive security price threshold (PSPT) constant, and a negative security price threshold (NSPT) constant is set in a security constant table 2002 for each security in the system. A net trade movement (NTM) variable for a trade order is set to the positive quantity of shares in the trade order if the trade order is a buy, and to the negative quantity of shares in the trade order if the trade order is a sell. A new NMB is calculated by adding the NMB before the trade, retrieved from a net price movement table 2008 (NMB (old)), to the NTM.

A security price increment (SPI) constant for the security which is the subject of the trade order is retrieved from the security constant table 2002. The NMB is then compared to the PSPT. If the NMB is greater than the PSPT, then the price for the security (SP) is calculated by adding the SPI to the SP before the trade which was retrieved from a security price table 2006. The NMB is then reduced by the PSPT and stored back to the net price movement table.

Conversely, if the NMB is less-than the NSPT (a negative value) then the SP (new) is calculated by subtracting the SPI from the SP (old). The NMB is then incremented by the NSPT.

After the above calculations are made, the SP is stored in a security price table 2006, which keeps track of all security prices. The NMB is updated in the net movement balance database. Each record of the net movement balance database further contains an increment tracking field for keeping track of the number of consecutive increments for the security instrument, up or down. Also, a price history tracking table 2010 is updated after each trade, performing a write SQL statement which adds a record comprising the SP, NMB, userID, and other information relating to the trade. This information is used by a marketing tool, explained below, which provides statistical information to market researchers.

Neither this Patent, alone nor in combination with others, disclose nor teach the feature of "determining whether any of the first computer program entities has offered an improved price for the security, wherein the improved price is higher than the proposed price for buying or lower than the proposed price for selling, and if an improved price

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has been offered, providing the improved price as the published price to the plurality of market participants".

Buist (US Patent : 6, 408, 282) discloses The system and method of the preferred embodiment supports trading of securities over the Internet both on national exchanges and outside the national exchanges. The preferred embodiment also supports an improved human interface and a continuous display of real-time stock quotes on the user's computer screen.

In the preferred embodiment, the users are subscribers to a securities trading service offered over the Internet. Each subscriber to this service is simultaneously connected from his own computer to a first system which provides user-to-user trading capabilities and to a second system which is a broker/dealer system of his/her choices. By user-to-user trading we mean a trade that is made between two users of the system. The system providing the user-to-user trading services includes a hierarchical network of replicated servers supporting replicated databases. The broker/dealer system is a server-based system such as any one of the systems currently used by broker/dealers to maintain their clients' accounts. The use of these broker/dealer systems in the present invention is conventional except for their interaction with the user-to-user trading system. In particular, each broker/dealer server communicates with the user's computer as well as with the root server of the user-to-user system when the user's account is affected, and the user-to-user system provides real-time continuously updated stock information and facilitates user-to-user trades that have been approved by the broker/dealer systems with which it interacts.

Users of the preferred system can trade securities with other users of the system after national market trading hours. As part of this user-to-user trading, a user can accept a buy or sell offer at the terms offered or he can initiate a counteroffer and negotiate a trade. This ability to have users trade and negotiate trades among themselves creates a market within the subject system, referred to herein as "after-hours market" or "Nite Market," but which is capable being operated 24 hours per day, 7 days per week. The preferred embodiment provides an ergonomic graphical user interface (GUI) that includes at least some of the following functional benefits in comparison with existing

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on-line consumer trading systems: (1) faster access to critical information; (2) faster execution of primary trading functions; (3) better decision making during the trading process; (4) fewer undetected critical errors; (5) easier correction of detected errors; (6) faster and more reliable problem resolution; (7) improved use of each user/trader's desktop workspace; (8) easier customization and configuration based on user experience; (9) easier and faster initial setup of each user's securities on the system; and (10) faster and more stable acquisition of trading skills. The GUI of the preferred embodiment graphically displays a "visual quote" that shows at a glance the condition of the market in a security and the user's relative position based on the status of the security in the marketplace. This visual quote provides a graphic representation of the important variables that the user needs to make accurate trading decisions without interpreting traditional numeric quotes. Further, the GUI of the preferred embodiment, unlike other on-line trading interfaces, does not require users to page to a separate screen to view their current and open positions in a security, thereby reducing errors and short-term memory demands on the user and improving the quality of on-line trading. The preferred embodiment also provides speed-trading functions as well as visual feedback that tracks the progress of the security trading process.

Although the preferred embodiment described below relates to computerized stock trading, it is readily applicable to trading of any securities and, in addition, a person skilled in the art will readily appreciate how the disclosed technology can be used for other forms of computerized trading (e.g., trading airline tickets, automobiles, or theater tickets).

Neither this Patent, alone nor in combination with others, disclose nor teach the feature of "determining whether any of the first computer program entities has offered an improved price for the security, wherein the improved price is higher than the proposed price for buying or lower than the proposed price for selling, and if an improved price has been offered, providing the improved price as the published price to the plurality of market participants".

BARRON ONLINE : EXTREME MARKETS, Evelyn Ellison Twitchell, Barron's Chicopee: April 10. 2000. Vol. 80, Iss; pg. 36, 1 pgs.) discloses THAT GREAT

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SCREAM HEARD ON Wall Street around midday Tuesday came from momentum investors being squeezed out of the market. Indeed, Tuesday's sickening volatility has shaken up some investors - so much, apparently, that they're beginning to look at things they only recently shunned: earnings, sales growth and cash flow.

"What's going on, to a great extent, is a correction of something that just had to be corrected: the extreme nature of the momentum market," says Stuart Schweitzer, global investment strategist at J.P. Morgan Investment Management.

Last year, many investors had a "what-goes-up-must-- go-up" mentality, he says. But now, "fundamental analysis is going to matter again." Others agree.

"The market is probably going to attach much more weight to visibility of earnings rather than pure momentum plays," says John Ryding, senior economist at ⓉBear Stearns.

That's been the hope of many pros, but now they think it's for real. They like sectors from financials and health care to retailers and even some technology stocks.

The people who spoke with Barron's Online most often cited favorable near-- term prospects for energy and basic materials stocks, where earnings growth this year could eclipse that of some high-- tech groups, such as computers and telecommunications. And despite rising U.S. interest rates, a strong worldwide economy is fueling these companies' growth. Forecasters have recently ratcheted up GDP growth projections for the U.S. and other countries, Salomon Smith Barney reports.

Although crude oil has fallen from its recent price peak above \$34 per barrel, at \$25 it's still at twice last year's levels. And the pros expect it to hold in the \$22-- \$24 range for most of the year.

"[Energy] companies can make very handsome profits with oil at these levels," maintains Ben Hock; manager of the AIM Global Growth Fund. That's why he likes the stocks of exploration-- and-production company Apache and oil-services firms ⓉHalliburton and ⓉSchlumberger.

ⓉHalliburton, the largest oil-service company in revenues, has been squeezing costs from its 1998 merger with Dresser Industries, and netted around \$600 million in cash from the recent sale of Dresser Rand and Dresser Pump, according to Jefferies & Co.

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At Thursday's closing price of 39 3/16, Halliburton trades at about 46 times First Call's consensus estimate for calendar 2000 earnings of 86 cents per share. That's a 25% discount to Schlumberger's price/earnings multiple of 61. And First Call projects Halliburton will grow its earnings by some 84% between 2000 and 2001. Plus, the stock is about 24% off its 52-week high of 51 3/4, set in August.

As for basic materials, everything from paper and metals to chemicals should benefit from price increases this year, says Richard Bernstein, chief quantitative strategist at Merrill Lynch. "We're actually in one of the biggest bull markets for industrial material prices in 25 years," he asserts.

In this group, Weyerhaeuser offers the "best combination of earnings at the right valuation," says Mary Farrell, Paine--Webber's investment strategist and author of the recently published *Beyond the Basics*.

Weyerhaeuser is a huge producer of market pulp, containerboard and printing and writing paper. As such, it should benefit from the big jump in pulp prices, which Morgan Stanley Dean Witter analyst Matt Berler forecasts will increase 27% this year to \$685 per metric ton.

Weyerhaeuser may not be growing like Cisco; the paper company's longterm growth rate is just 8%. But at 57 1/4, its shares were trading at just 13 times First Call's projected 2000 earnings per share of \$4.47. And coming off a cyclical bottom, Weyerhaeuser's earnings are expected to grow 35% this year and 38% in 2001.

Neither this non-patent literature, alone nor in combination with others, alone nor in combination with others, disclose nor teach the feature of "determining whether any of the first computer program entities has offered an improved price for the security, wherein the improved price is higher than the proposed price for buying or lower than the proposed price for selling, and if an improved price has been offered, providing the improved price as the published price to the plurality of market participants".

Benevolent's Internetbond sale is its largest offering, Margie Manning. St. Louis Business Journal. St. Louis: Apr 10, 2000, Vol.20, Iss. 31: pg. 5) discloses the National Benevolent Association turned to the Internet to sell \$48.2 million in bonds - the largest debt offering ever for the St. Louis-based operator of senior living centers.

The association's "road show" to encourage investors to buy the bonds was marketed over Bloomberg LP by A.G. Edwards & Sons.

Joe Mulligan, vice president and director of the senior-living finance practice at A.G. Edwards, said there have been fewer than 40 municipal offerings in the United States marketed over the Internet, and the National Benevolent Association's (NBA) is believed to be the first for a senior living operator.

The password-protected Web site got more than 400 hits from potential investors in the week before the bonds were priced on April 4. Visitors to the site saw and heard video clips of Mulligan; Cindy Dougherty, National Benevolent Association president; and Sterling C.B. Ellis, the group's vice president for human resources management development.

"We were exposed to hundreds of people who never heard of us before," Dougherty said.

Ellis said the association picked up at least six new institutional investors in the bond sale.

The high level of exposure helped make the deal more competitive and allowed the bond price to come down, lowering the interest rate the organization pays to investors. The National Benevolent Association will pay slightly over 7 percent to investors who bought the \$20.3 million in bonds that were sold for a fixed interest rate.

The remaining bonds will sell for a variable interest rate and will be priced April 25. Dougherty switched the association's business to A.G. Edwards from Piper Jaffrey of Minneapolis last year. She said Mulligan introduced the idea of the Internet marketing strategy about six months ago during a lunch at Copperfield's restaurant, near the association's Maryland Heights headquarters.

Mulligan said marketing over the Internet is more cost effective than traditional means. "Depending on how many cities you go to, it could cost tens of thousands of dollars for a road show. In comparison, Bloomberg and Net Road (a Yahoo! site) cost \$5,000 to \$10,000," he said. "If management has to spend two to three weeks out of the office, it's not just the cost of travel, it's the lost opportunity cost."



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The association raised new money and refinanced existing debt in the complex offering. Ellis said the anticipated cash savings from refinancing over the life of the issue would be \$12 million.

The National Benevolent Association's the third-largest nonprofit operator of senior living centers in the United States, with 63 centers in 23 states. It's using the proceeds of this bond sale to complete two major projects: Cypress Village, a skilled nursing and independent living facility in Jacksonville, Fla.; and Village at Skyline, an independent living and assisted living facility in Colorado Springs, Colo.

The bonds received investment grade ratings from Fitch IBCA, which rated the bonds BBB+, and Moody's Investors Services, which rated the bonds Baa2. Mulligan said of the 5,000 senior care housing providers in the United States, fewer than 100 have an investment grade rating.

The association posted \$156.7 million in revenue last year and had an excess of revenue over expenses of \$8.7 million.

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### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clement Graham whose telephone number is (571) 272-6795. The examiner can normally be reached on 8:30am-5:00pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Abdi can be reached on (571) 272-6702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status

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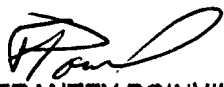
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information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C GRAHAM

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Sept 15, 2007

  
FRANTZY POINVIL  
PRIMARY EXAMINER  
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